

AMSAT News Service Weekly Bulletins

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AMSAT NEWS SERVICE

ANS-264

The AMSAT News Service bulletins are a free, weekly news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS publishes news related to Amateur Radio in Space including reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

The news feed on <http://www.amsat.org> publishes news of Amateur Radio in Space as soon as our volunteers can post it.

Please send any amateur satellite news or reports to:
ans-editor at amsat.org.

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ANS-264 AMSAT News Service Weekly Bulletins

AMSAT News Service Bulletin 264.01

From AMSAT HQ Kensington, MD.

September 21, 2014

To All RADIO AMATEURS

BID: \$ANS-264.01

Deadline Extension for AMSAT Symposium Papers

The submission deadline for papers to be included in the conference proceedings has been extended to September 30. We welcome papers and presentations on any subject of interest to the amateur satellite community. Please send proposals to
Dan Schultz, [n8fgv\(a\)amsat.org](mailto:n8fgv(a)amsat.org)

Details for submission may be found at http://www.amsat.org/?page_id=1568.

[ANS thanks Dan, N8FGV, for the above information]

AMSAT Space Symposium in Baltimore Gearing Up with Exciting New Speakers

Plans for the 2014 AMSAT Space Symposium in Baltimore Oct 10-12 are in high

gear, with the announcement of exciting speakers, space auction plans and papers and presentation submittals underway. This year's space symposium will, in part, celebrate AMSAT's 45th anniversary.

There is still time to register, so please go to www.amsat.org and sign up.

Highlights of this year's symposium include:

Keynote Speaker: Jan King, W3GEY, founding member of AMSAT and former member of the Board of Directors & V.P. of Engineering

The AMSAT Space Symposium's Keynote Speaker will be Jan King, W3GEY, founding member of AMSAT and former member of the Board of Directors & V.P. of Engineering. Jan's keynote speech, entitled "Never, Never, Never Give Up!" will be presented during the Symposium banquet on Saturday October 11. As a teaser for his speech, Jan shared the following with our symposium team:

" So very much has changed in 45 years! For starters, our hobby of 1968 has become an industry for one. Launch vehicles can't be had for the price of a NASA Administrator's letter anymore. Launch costs are \$100K per kilogram now. ITAR? Not worth discussing. So, what do we do? Is it time to say, "We had a really good run at this" and let it go? We showed some people who cared and wanted to listen that you can do a lot with a little. Should we call it quits and give it up? There are those who ask me questions that start with, "Back in your day....?" It is particularly those people, I'd like to show...that we really are made of the right stuff. We still have things we know that Government Experts and wide-eyed university graduate students don't. Silicon Valley is now filled with satellite experts who aren't. The average university graduating electrical engineer still can't make a 2 meter pre-amp with a 1 dB noise figure - and wouldn't know how to start. Unless, of course, they figured it out from the Internet. Ah yes, the Internet! Another small change since 1968. We'll talk about it in October. Hope to see you in Baltimore. W3GEY."

Special Guest Presentation: Tuskegee Airman Col. Charles E. McGee

The AMSAT symposium committee has confirmed that one of the original Tuskegee Airman, Col. Charles E. McGee, will be attending our conference on Friday October 10th. Col. McGee will give a special presentation at our symposium on his experiences as a Tuskegee Airman and as an Army Air Corps and Air Force Pilot. A short question and answer period will follow.

Born on December 7, 1919, McGee rose to the rank of Eagle Scout in the Boy Scouts and, shortly after WWII broke out, joined the Army. He became a pilot in what was dubbed the Tuskegee Experiment, the first squadron of African American pilots, also known as the "Red Tails" from their red markings on the tails of their aircraft. Col McGee and his Tuskegee colleagues fought two

wars—World War

II and the war on segregation. This required them to develop an unprecedented level of discipline, excellence and fortitude to achieve success.

In World War II McGee flew numerous aircraft, including the famous P-51 Mustang

as part of the 332 Fighter Group, one of three groups designated as the “Red Tails.” He provided fighter escort for the B-24 Liberator and B-17 Flying Fortress bombers over Germany, Austria and the Balkans. He holds a US Air Force record of 409 fighter combat missions flown in World War II, Korea and Vietnam. Col. McGee received numerous awards for his service, including the Legion of Merit, Distinguished Flying Cross, Bronze Star Medal, and Air Medal

with 25 oak leaf clusters, amongst others. In 2007 Col McGee and the surviving Tuskegee Airmen were awarded the Congressional Gold Medal by President George W. Bush.

Col. McGee’s presentations are an inspiration to all. He demonstrates, through his life lessons, the need to persevere despite all obstacles and to do your best in all endeavors. Do not miss out on this opportunity to meet this remarkable living legend.

Friday Night Reception and Space Auction

This year’s reception, to be held from 7-9 pm on Friday October 10, will include

a space auction. All proceeds from the auction will support AMSAT’s two major

initiatives—the development and launch of the FOX satellite series and the ARISS

program. We have received some very exciting items for the auction. And we are

asking for your help in donating specialty items for auction (minimum value \$100) that will attract symposium attendee’s attention and get them bidding up

the item price. If you have any items that are ham related (no boat anchors please), items of historical value, space related and/or autographed items we

would love to get your donations. Think out of the box on this—what exciting things would you like to see in this auction? If you have something to donate

to the Symposium auction, please send an e-mail to Frank Bauer, KA3HD0, who will

work with you on getting your item or items into the auction. Frank’s e-mail address is ka3hdo at verizon.net

Sunday Tours

Symposium participants can choose one of the following informal tours:

Baltimore Inner Harbor Tour (including the Aquarium), the B&O Railroad Museum,

Edgar Allen Poe House or the National Electronics Museum. The National Electronics Museum is opening its doors exclusively for AMSAT on Sunday from 1-

3 pm. If you are interested in this tour, please contact Dan Schultz by e-mail

(n8fgv(a)amsat.org) so we can get a headcount.

Monday Udvar Hazy National Air and Space Museum Tour

There is still room on the bus for the tour of the Udvar Hazy center planned for Monday October 13. Go to the AMSAT web site for tour details and signup.

Sunday ARISS Operations Team Meeting

Anyone interested in volunteering to support the ARISS program is invited to attend the ARISS Operations team meeting from 9-noon Sunday October 12.

We will have a number of the ARISS-US team leaders and mentors on-hand to discuss the program and get you involved. We will also be discussing improvements, changes and strategies to enhance ARISS operations.

ANS thanks the Symposium Committee for the above information]

Results of 2014 AMSAT-NA Board of Directors Election

As a result of the 2014 AMSAT-NA Board of Directors Election the following members were elected to serve for two years: Tom Clark, K3IO; JoAnne Maenpaa, K9JKM; and Lou McFadin, W5DID. Jerry Buxton, N0JY will serve the remaining year of SK Tony Monteiro, AA2TX's term. The First Alternate is Drew Glasbrenner, K04MA, and the Second Alternate is Frank Griffin, K4FEG. The results of the voting with 635 ballots cast are as follows:

Tom Clark, K3IO 457
JoAnne Maenpaa, K9JKM 439
Lou McFadin, W5DID 421
Jerry Buxton, N0JY 268
Drew Glasbrenner, K04MA 261
Frank Griffin, K4FEG 232
Steve Coy, K8UD 178
Bryan Klofas, KF6ZE0 132

[ANS thanks Martha for the above information]

Contract to Build Es'hailSat Includes AMSAT-DL Phase 4 Transponders

Gunter Krebs reports on his Space Pages on the web that Es'hailSat has signed a contract with MELCO to build the Es'hail-2 geostationary comsat. Es'hail 2 is a planned communication satellite operated by Es'hailSat, the Qatar Satellite Company. It will also feature an radio amateur payload.

The new satellite will be positioned at the 26° East hotspot position for TV broadcasting and significantly adds to the company's ability to provide high quality, premium DTH television content across the Middle East and North Africa. It will feature Ku-band and Ka-band transponders to provide TV distribution and government services to strategic stakeholders and commercial customers who value broadcasting and communications independence,

interference resilience, quality of service and wide geographical coverage. Es'hail 2 is expected to be launched at the end of 2016.

In September 2014, a contract with MELCO was signed to build the satellite based on the DS-2000 bus.

Es'hail 2 will also provide the first Amateur Radio geostationary communication capability linking Brazil and India. It will carry two "Phase 4" Amateur Radio transponders. The payload will consist of a 250 kHz linear transponder intended for conventional analogue operations in addition to another transponder which will have an 8 MHz bandwidth. The latter transponder is intended for experimental digital modulation schemes and DVB amateur television. The uplinks will be in the 2.400-2.450 GHz and the downlinks in the 10.450-10.500 GHz amateur satellite service allocations. Both transponders will have broad beam antennas to provide full coverage over about third of the earth's surface. The Qatar Amateur Radio Society and Qatar Satellite Company are cooperating on the amateur radio project. AMSAT-DL is providing technical support to the project.

This story is posted at:
http://space.skyrocket.de/doc_sdat/eshail-2.htm

[ANS thanks Gunter's Space Pages for the above information]

SpinSat Launched on Falcon 9

On Sunday, September 21 at 0552:03 UTC SpaceX launched a Falcon 9 from Florida carrying the satellite SpinSat with its amateur radio payload to the International Space Station (ISS).

On arrival at the ISS it will be put into storage until deployment, later in the Fall, from the airlock of the Japanese Experiment Module (JEM).

Developed by the Naval Research Laboratory (NRL) SpinSat is a 56 cm sphere weighing 57 kg that has 12 Electronically-controlled Solid Propellant (ESP) thrusters spread in pairs throughout the surface of the satellite. They will be fired in pairs to spin the spacecraft. With just primary batteries and only 4.8 grams of fuel this phase may last between three to six months.

The spacecraft will be used to calibrate the space surveillance network. Lasers will be fired at SpinSat from the ground, the light reflected back will be measured to determine where in time and space the satellite is passing overhead. SpinSat will also model the density of the atmosphere.

SpinSat carries a 2 watt RF output 9600 bps AX.25 packet radio store and forward system on 437.230 MHz.

Additional details about SpinSat are available at the following websites
<http://www.nrl.navy.mil/media/news-releases/2014/with-spinsat-mission-nrl-will-spin-small-satellite-in-space-with-new-thruster-technology>

NASA – SpinSat
http://www.nasa.gov/mission_pages/station/research/experiments/1019.html

[ANS thanks Trevor, M5AKA, for the above information]

ESTCube-1 Solar Sail Experiment

After more than a year of preparations on Tuesday, September 16, 2014, the team started to deploy the electric solar sail tether on-board ESTCube-1.

The process of burning the tether end-mass and spool locks and reeling out the first few centimeters of tether will start during the 09.06 – 09.19Z pass over Estonia. This is a high pass and should be visible over most of the Europe.

During the locks release process and after reeling the tether out some centimeters, images will be taken.

If everything is OK with the tether, additional unreeling will take place in coming days.

If you are interested in receiving ESTCube-1 during those exciting passes, the UZ7H0 9600 bps packet softmodem and an Online Telemetry Decoder by Mike Rupprecht DK3WN can be used. But basically any 9600 bps G3RUH TNC or decoder can be used to receive ESTCube-1.

ESTCube-1 Online Telemetry Decoder by Mike Rupprecht DK3WN
http://www.dk3wn.info/files/estcube_online.zip

We are looking forward to receiving your reports on the address es5e AT estcube DOT eu, and we would really appreciate if you would also send received data in live, using Mike's decoder.

You can also connect with ESTCube-1 time via Facebook
<https://www.facebook.com/estcube>

[ANS thanks Tõnis, ES5TF, for the above information]

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In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

Primary and secondary school students are eligible for membership at one-half the standard yearly rate. Post-secondary school students enrolled in at least half time status shall be eligible for the student rate for a maximum of 6 post-secondary years in this status. Contact Martha at the AMSAT Office for additional student membership information.

73,

This week's ANS Editor,
Lee McLamb, KU40S
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